(h) The pump room ventilation outlet duct exhausts shall terminate at a distance of at least 6 feet above the enclosed space or pump room and at least 6 feet from any entrance to the interior part of the vessel. The discharge end of the exhaust ducts shall be located so as to preclude the possibility of recirculating contaminated air through the pump room, or other spaces where personnel may be present.

[CGFR 70-10, 35 FR 3714, Feb. 25, 1970, as amended by CGD 88-100, 54 FR 40040, Sept. 29, 1989]

## §151.50-6 Motor fuel antiknock compounds.

When transporting motor fuel antiknock compounds containing tetraethyl lead and tetramethyl lead the requirements listed in this section shall be observed.

- (a) Tanks used for these cargoes shall not be used for the transportation of any other cargo except those commodities to be used in the manufacture of tetraethyl lead and tetramethyl lead.
- (b) Pump rooms shall be equipped with forced ventilation with complete air change every 2 minutes. Air analysis shall be run for lead content to determine if the atmosphere is satisfactory prior to personnel entering the pump room.
- (c) Entry into cargo tanks used for the transportation of these cargoes is not permitted.
- (d) No internal tank inspection is required. If it is desired to internally inspect tanks used for these cargoes, the Commandant must be notified in advance before such inspection is made.
- (e) The provisions of §151.50-5 shall also be met as a requirement for shipping antiknock compounds containing tetraethyl lead and tetramethyl lead.

## §151.50-10 Alkylene oxides.

- (a) For the purpose of this part, alkylene oxides are considered to be ethylene oxide and propylene oxide.
- (b) Alkylene oxides transported under the provisions of this part shall be acetylene free.
- (c)(1) No other product may be transported in tanks certified for an alkylene oxide except that the Commandant may approve subsequent transportation of other products and return to

alkylene oxide service if tanks, piping and auxiliary equipment are adequately cleaned to the satisfaction of the Marine Inspector.

- (2) Unless authorized by the Commandant, no other kind of cargo except methane, ethane, propane, butane and pentane shall be on board a tank vessel certificated for the carriage of an alkylene oxide at the same time an alkylene oxide in either the liquid or vapor state is present in any cargo tank. Alkylene oxide tanks shall not be installed in tanks intended for any other cargo.
- (d) All valves, flanges, fittings, and accessory equipment shall be of a type suitable for use with the alkylene oxides and shall be made of steel or stainless steel, or other materials acceptable to the Commandant. Impurities of copper, magnesium and other acetylide-forming metals shall be kept to a minimum. The chemical composition of all material used shall be submitted to the Commandant for approval prior to fabrication. Disks or disk faces, seats and other wearing parts of valves shall be made of stainless steel containing not less than 11 percent chromium. Mercury, silver, aluminum, magnesium, copper, and their alloys shall not be used for any valves, gauges, thermometers, or any similar devices. Gaskets shall be constructed of spirally wound stainless steel with ''Teflon'' or other suitable material. All packing and gaskets shall be constructed of materials which do not react spontaneously with or lower the autoignition temperature of the alkylene oxides.
- (e) The pressure rating of valves, fittings, and accessories shall be not less than the maximum pressure for which the cargo tank is designed, or the shutoff head of the cargo pump, whichever is greater, but in no case less than 150 pounds per square inch. Welded fittings manufactured in accordance with A.N.S.I. Standards shall be used wherever possible, and the number of pipe joints shall be held to a minimum. Threaded joints in the cargo liquid and vapor lines are prohibited.
- (f) The thermometer shall terminate in the liquid space and shall be attached to the shell by welding with the